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ABSTRACT

Through a review of the current literature, the problems of minority college students and a self-help alternative to traditional counseling of such students are examined in this document. The discussion includes an analysis of cognitive and noncognitive factors that influence academic perfcrmance, adjustment, and continuation into graduate education. The literature indicates that minority students have more problems in terms of the skills and characteristics needed for academic survival and achievement than other students. In a discussion of the relationship between minority student characteristics, their psychological and academic problems, and their academic behavior, it is suggested that self control methodology could be more effective in modifying academic behavior than traditional counseling techniques and that the "biblioguidance" of self management systems is as effective as counselor presented formats. It is stated that although research on self control and self help techniques is relatively new and its effectiveness with minority students is unproven, evidence indicates that its use could prevent counseling problems formerly encountered. (Author/AM)

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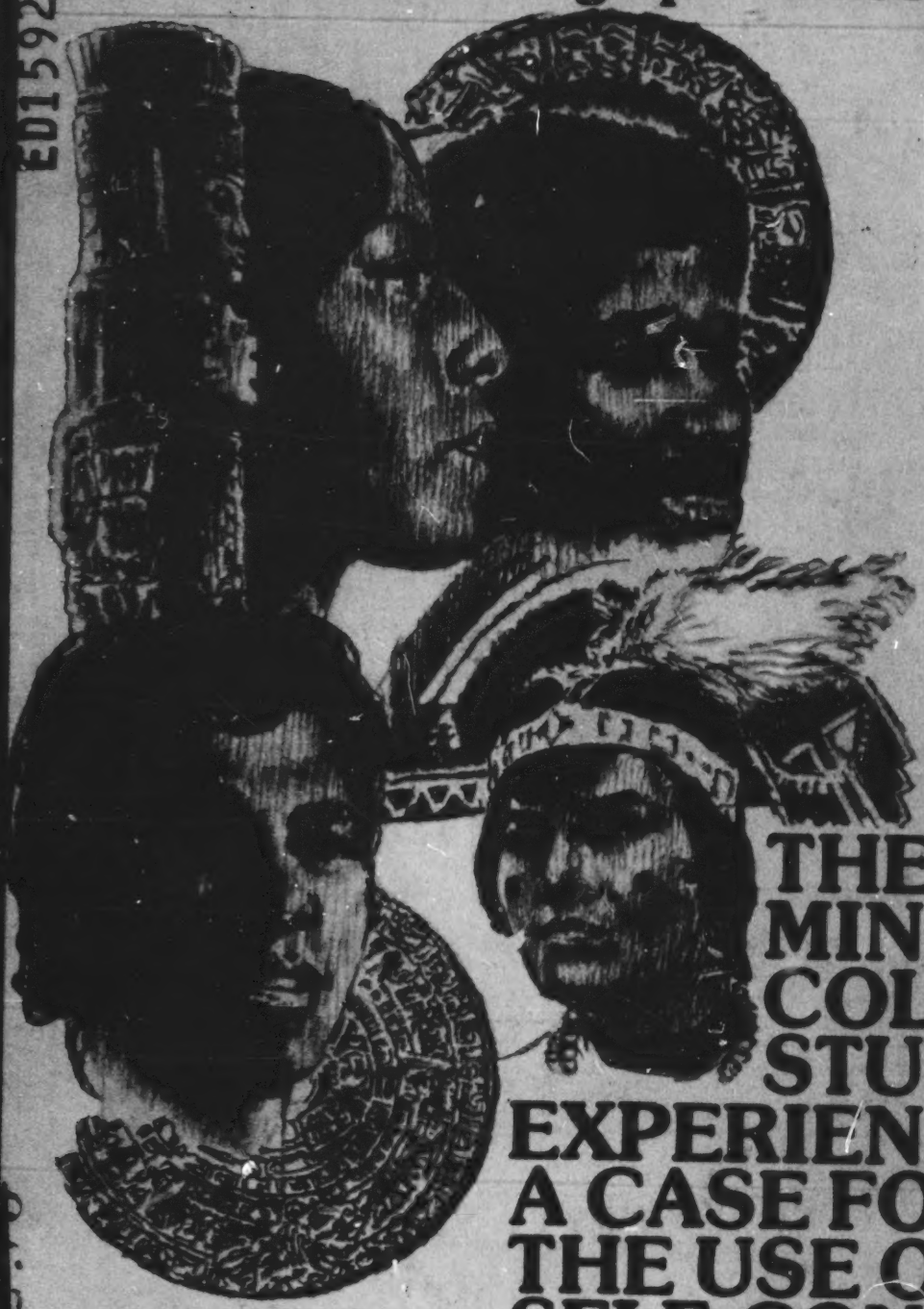

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by Luis Nieves

Office for Minority Education
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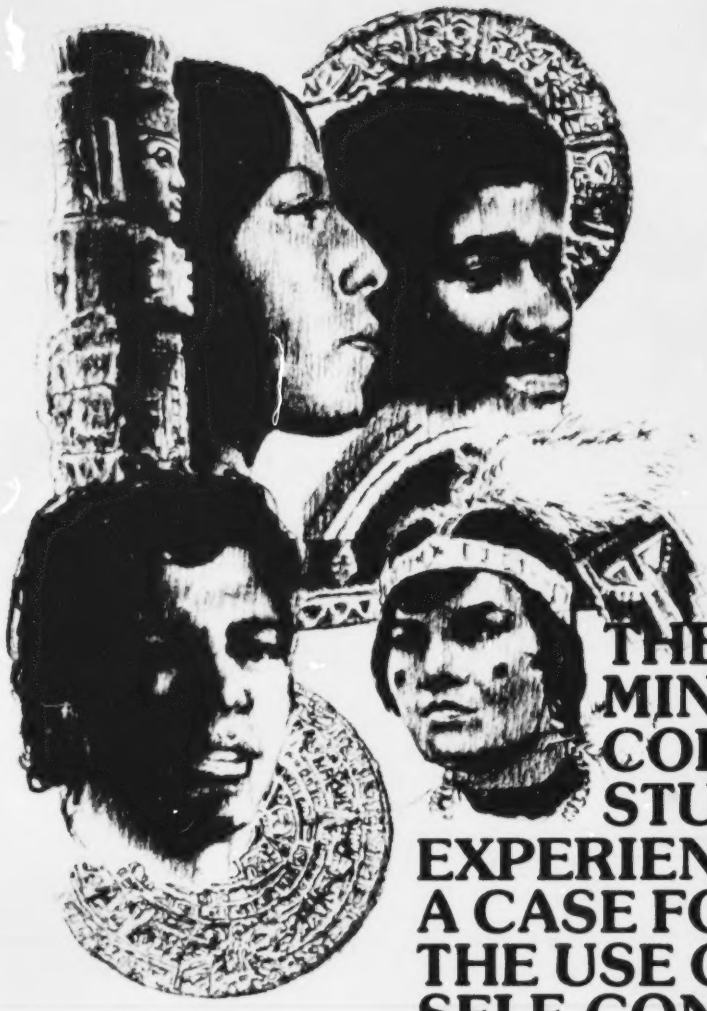

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INTRODUCTION: Nature of the Literature

The extensive literature on the minority student in higher education varies from the anecdotal to the empirical. There are innumerable essays describing present and past problems and prescribing massive social change as the solution. On the other hand, there are well-controlled studies that define specific characteristics of a select minority group and examine how those characteristics vary as a function of some independent variable(s). These two extremes, and the many sources which fall between them, offer interesting and challenging ideas but present serious difficulties of interpretation.

For example, few of the studies which could be classified as experimental have ever been replicated and, therefore, even the best of them are not conclusive. Experimental studies of important constructs, such as self-concept, do not all define the construct in the same way. When equivalent definitions are used, different measuring instruments are employed, and that makes comparisons difficult, if not impossible. Small or unique samples are commonplace, and methodological compromises are frequently made in order to accommodate situations. The descriptive studies, because of their survey techniques, have yielded the most informative data and, within their methodological constraints, have provided the most reliable information on the minority college student.

There is no dearth of summaries of the survey literature on the minority college student. Klingelhofer and Hollander (1973), Kendrick and Thomas (1970), and E.W. Gordon (1967) are only a few. Each has taken a slightly different emphasis. Klingelhofer and Hollander, for example, lump many subgroups under the rubric of "New Students," and Kendrick and Thomas offer a useful review focusing on the admission and evaluation of minority students in higher education. Each survey identifies an impressive array of characteristics associated with the minority student. There is, for example, a long list of nonintellective, attitudinal and/or emotional factors that are related to success or achievement. There are, in addition, the traditional cognitive measures by nationally normed achievement tests as well as the carefully considered opinions on the role of a variety of environmental factors in the adjustment of minority students in college. In the review which follows, the noncognitive factors are related to academic performance, adjustment, and continuation into graduate education.

Noncognitive factors then become the foundations of the target behaviors (characteristics) that may be addressed in a self-help intervention.

Plan of the Review

A survey of the literature will yield strong evidence that minority students can adopt a self-help bibliogуidance format and apply it to their most critical problems. The first step, then, is to identify salient problems, and the second is to establish a bridge between these problems and the self-help techniques. This is met by applying Lazarus' (1973) multimodal analysis to a system of self-assessment.

The college student in general, and the minority student in particular, rarely has the opportunity to systematically assess his or her own strengths and weaknesses. Multimodal assessment does not require that the student learn a new terminology and, when connected to self-control interventions, the multimodal system is extremely flexible and manageable by students.

The pertinent literature on self-control and self-help techniques will be reviewed. This body of research is relatively new and does not yet yield unequivocal data which would guarantee its effectiveness with minority student populations. Nevertheless, the practitioner must abstract from the available work on self-control of academic behaviors and estimate its utility with the target population. Self-control methods may avoid many of the traditional problems faced in the counseling of minority adolescents, such as failure to utilize mental health services (Davis & Swartz, 1972; Banks, 1972). Self-control methods rely instead on the motivation of the client for personal change and adjustment. There does exist considerable evidence that the minority student is strongly motivated (Harris, 1969) and has high aspirations (Egeland, et al., 1970). Patterson (1973) provides evidence for the efficacy of the clinical use of self-control methods in the natural environment. Thorensen and Mahoney (1974) suggest that the development of skills in the very life situation in which they will be used avoids the problems of transfer from either the laboratory or the consulting room to the real-life situation.

CHARACTERISTICS AND ATTITUDES OF MINORITY COLLEGE STUDENTS

The search for factors which will help account for the successes and failures of minority college students has led to a review of the data on achievement and related academic behaviors of minority students. There is an understandable imbalance of studies on black students when compared to other minority groups—understandable because: (1) overwhelming numbers of minority students in higher education are black; (2) there are several large and reputable black colleges and universities; and (3) most members of the minority community of scholars are black. Some would add that the problems of the black American have been more severe and more profound than those of other minorities. The voluminous data on the black student have not generated confidence in their own validity or reliability.

There is a need to describe the minority student as Froe did in 1964. In Froe's description, only 21 percent of the black students' parents had any college experience, compared to 52 percent of their white counterparts. Fifty-one percent of the black students' families had incomes of $6,000 or less, compared to only 20 percent of their white counterparts. The black students' fathers' occupations were likely to be unskilled (51.8 percent), and the black students were unlikely to score higher than the twenty-fifth percentile on standard achievement tests.

Gibbs (1974) intensively reviewed 41 cases of black students who received counseling at the college mental health center and abstracted four typical modes of adaptation to the white-dominated institution.

1. *Withdrawal*—This mode is characterized by apathy, depression, and feelings of hopelessness. This adaptation was chosen by lower-class blacks who attended predominantly black high schools and had academic problems.

2. *Separation*—This mode is characterized by anger, hostility, frequent interpersonal conflict, rejections of white culture, and contempt for middle-class values. This adaptation was chosen by nonmiddle-class blacks who came from predominantly black high schools.

3. *Assimilation*—This mode is characterized by constant need for approval and acceptance, conformity, high achievement, sensitivity to ethnic cues, and a strongly developed sense of inadequacy. This adaptation was chosen by students from middle-class backgrounds.

4. *Affirmation*—This mode is characterized by positive self-acceptance, ethnic identification, and high motivation. This mode was also chosen primarily by students with middle-class orientation.

Withdrawal was the most popular response to perceived marginality on a predominantly white campus. Self-reported feelings of inadequacy were highly correlated with the withdrawal mode. Self-reported feelings of adequacy were correlated with affirmation, the second most popular adaptation. Notable is the clear relationship between mode of adaptation and social class, with none of the lower-class students adopting the affirmation mode and none of the upper-class students adopting the withdrawal mode. The adaptation styles receive observational support from Jackson and DePuydt (1974).

Leon (1974) attempted to identify personality changes in specially admitted disadvantaged students after one year at a major Northeastern university. Eighty-seven black and Puerto Rican students were administered the Rotter Interpersonal Trust Scale (I-E) and the Fricke Opinion, Attitude and Interest Survey during the first and last two weeks of their freshman year. Grade point average was used as the success criterion. Interestingly, Leon again established the relationship between belief in inner personal control and academic achievement, but her findings strongly suggest that internal control results from experiencing academic success rather than giving rise to it. Leon concludes that there is at least a significant interaction between internal control and academic achievement.

Froe (1968) surveyed the entering freshman class at Morgan State College. These students, in large part, had expectations of academic study beyond the baccalaureate level. Over 60 percent had career objectives in either academic or professional areas. In all other respects, Froe's 1968 survey paralleled his 1964 survey, with only minor variations in the white control group. Bradfield's (1967) description of the low-income minority student parallels Froe's findings and further suggests that this group of students has a lower need for precision and is resistant to structure.

Much of the literature suggests that college, for the minority and economically disadvantaged student, is a powerful experience in changing attitudes. Minority students, for the most part, enter college with very high expectations and aspirations (Froe, 1968; Klingelhofer & Hollander, 1973; Cross, 1971). They bring with them a mixture of ethnic poverty and American television culture, an idealized view of college, and a generally significant fear of failure. If the student comes from a predominantly ethnic high school, he has yet to experience personally the full implications of minority status. The Bradfield study documented the personality change in the successful minority college student, but a similar study has not been conducted on the failing minority student, although it is hypothesized that even the failing minority college student is more likely to continue his education at a later time. Bradfield, nevertheless, found changes in the direction of higher toler-

ance for structure and greater belief in self-determination.

Maruyama (1971) studied the essays of Oriental-American students in southern California. Striking, in all the essays, were the different processes taken to effect a realization of "differentness." The Oriental student is perhaps the best example for highlighting the painful effects on an adolescent of being different because he or she is a good achiever in the American school system. In the '60s and '70s, there has been less negative popular opinion experienced by the Oriental minority through the American media. The Oriental student is notably recognized, however, not for his academic performance or even for his ability to adapt to a different culture, but rather because he looks different. The testimony of the essays reviewed by Maruyama supports the view that just being different is difficult for an adolescent, and often traumatic.

One may wonder what special attitudes minority students, as objects of racism and discrimination, might have about racial and ethnic differences. Banks (1970) sampled 174 black students at Howard University. He measured anti-white and anti-Negro ideology by the Stechler Scales, which consist of negative and positive statements about racial groups. Since this was a near replication of the Stechler study of 1957, the study additionally provides a measure of change of dominant Negro attitudes over a period of time. Banks concludes that racial attitudes of black students have indeed changed. As their perception of Negro ethnic groups is becoming more positive, their perception of the white majority is becoming more negative. The black male had greater acceptance of anti-white ideology. These findings are particularly important in the face of previous findings by Asher and Allen (1969), who studied the doll play of black children and found consistent preference for white dolls. Banks' findings still suggest that black students accept anti-black stereotypes to a greater degree than they accept anti-white stereotypes. Like Gurin and Epps (1975), Banks identifies the communality experienced by blacks in American colleges. Gurin and Epps identify it in the form of aspirations to help the black community in their professional life, while Banks identifies it as increasing black pride with corresponding anti-white ideology.

Harris (1969) surveys the reasons students attend college. His results indicate that 75 percent attend college for instrumental reasons. Blacks more often reported occupational reasons for attending college. Harris confirmed the more generalized finding of high aspirations for black youths and especially for the black female. A sharp absence of intellectualism among the black students was noted, with the speculation that this may account for the under-representation of blacks in research and scholarly fields. There are more black females in college than black males. Females have higher aspirations, but more black males go on to graduate school and receive doctorates. In summary, then, Harris found two dominant reasons for blacks attending college: preparing for an occupation, and acquiring knowledge about community and world affairs.

Achievement

Determining the achievement of minority students in college has become an increasingly difficult task. Our confidence in course grades is continuously eroded by reports of grade inflation (Scully, 1975). A second traditional measure of achievement has been nationally normed achievement tests. These measures, too, have been the object of negative testimony, with claims that cultural bias is inherent in the test and tends to depress scores. A third measure offered as an indicator of achievement is graduation or the attainment of a degree. These measures have also attracted suspicion, with the claim that, since 1960, the pressure to graduate minority students has softened graduation requirements. These caveats provide the backdrop for our review of some factors which affect the achievement of minority students in college.

Gurin and Epps (1975) surveyed 10 representative black colleges from the more than 100 in the United States. They followed their students over a four-year period (1964-1968) and, by equivalent measures at two different periods, identified three factors related to the performance of black college students. First, there were clear sex differences, with women having aspirations as high as men, but expectations significantly lower. According to Gurin and Epps, this pattern culminated in differential performance as measured by grade point average and performance on an anagrams test. These patterns continued into graduate education with a general ratio of two doctoral degrees earned by black males for every doctoral degree earned by a black female. Second, they found that achievement motivation, as measured by personal sense of control and academic self-confidence, was also related to performance. Third, their survey indicated that the college environment, as measured by amount of faculty contact, high academic values, and diversity of extracurricular activity, were similarly related to student performance. Minority performance, independent of how measured, is thus affected by a multitude of factors, some residing within the student and some within the institution. Their interaction, one would expect, would make performance prediction for minority students less reliable than for traditional students.

The gloomy predictions of minority academic performance have received considerable attention since the early 1960s. This question has involved considerable controversy, but the question of overprediction has been of particular significance. Most nationally normed tests appear to overpredict the performance of minority students. Interpretation of this finding has been the subject of contention. Stanley (1971) represents the position that conventional, broad-based tests have little validity when applied to nontraditional students. He concludes that the tendency to overpredict

the academic achievement of blacks results from the limitations inherent in extending or extrapolating a linear prediction model to groups unlike those representing the original norming base. Stanley concludes that the forecast grade point averages (GPAs) for nontraditional students generated from regression coefficients based on students having the characteristics of traditional college-bound populations (with no corresponding representative group of nontraditional students) will tend to exceed performance. Stanley reports that some institutions using this kind of regression formula predicted that the college performance of ethnically mixed nontraditional students would exceed their generally poor performance in high school. This prediction was made in spite of the general and reliable observation that first-year college GPAs fall below high school grades. To further demonstrate this point, Cleary (1968) attempted to predict the grades of white students from black means. The result was underprediction. The direction of the error of the prediction is changed, but the error is based on the same principle.

Pfeifer and Sedlacek (1971) have studied the predictive validity of high school grades and the Scholastic Aptitude Test (SAT) for black students in predominantly white institutions. The results of previous studies (Bartlett & O'Leary, 1969) have generally supported equal validity in subgroups, with differences only in predictor and criterion mean performance. However, other findings (Stanley & Porter, 1967) have suggested differential predictive validity by ethnic and sex differences, with black males being the most difficult to predict. The finding of overprediction for blacks and other minority student populations is stable. Consequently, many researchers conclude that separate regression equations are appropriate (Bowers, 1970; Temp, 1970; Harris & Reitzel, 1967; Pfeifer & Sedlacek, 1971). It should be noted that the majority of these validity studies use the GPA during the first year as their performance criterion, despite the highly acknowledged observation that minority students tend to show a very low mean GPA in their freshman year, but considerable improvement after that (Sampel & Seymour, 1971).

Two major conclusions may be drawn from these data on the achievement of minority students. First, minority students—in particular, black students—score lower on nationally normed tests such as the SAT. This finding has been consistent over samples and over time. Second, initial year GPAs of minority students are very low. (This second finding is fairly well predicted by nationally normed tests.)

Performance predictions and criterion measures may be artificial reflections of the student characteristics on which evaluations and expectations are based. These expectations, because they are low, serve to further depress performance as traditionally measured. Two types of factors have been studied to account for the predicted low performance: first, cognitive abilities factors, and second, nonintellective factors, which include emotional, psychological, cultural, and environmental contributions to academic achievement. Although the standard cognitive achievement measures reliably demonstrate poorer performance (achievement) of minority and nontraditional students, it is interesting to note that minority students persist (another measure of achievement) as well as nonminority students. Even when minority students have higher high school GPAs than their white counterparts, they tend to score lower on the SAT (Astin, 1970).

The most important measures of achievement are completing the curriculum and attaining a degree. These measures may be suspect as confounded criteria—how much less confounded than college GPAs in the first year is not clear. The data, as reported, appear to be clear and consistent. Minority populations, disadvantaged student groups, or poverty students all seem to perform, by the two dominant measures (GPAs and standardized tests), significantly below traditional college students. The question still left unanswered is why. There is no shortage of hypotheses, but most fall into one of two categories, cognitive or noncognitive factors. The selected cognitive data appear reliable. However, much of their validity is questioned. Few investigations refute the contention that minority students who are also from economically depressed families are ill-prepared, by traditional measures of achievement, for college-level work. Nevertheless, it is evident that a large number of high-risk students do succeed in completing the average college curriculum (Chalghian, 1969; Lavin & Silberstein, 1975).

Cognitive Factors and Achievement: Assumption

The search for cognitive factors accounting for the low academic performance of minority students leads us directly to the question of innate ability or intelligence. This issue will not be reviewed here as that has already been done well by Loeghlin, Lindzey, and Spuhler (1975). This review will take the position that intelligence is equally and normally distributed among all racial populations. Individual variance can be accounted for by both genetic and environmental factors. The environmental variables dominate the manifestation and final phenotypic expression of intelligence.

The stress is placed on the search for noncognitive characteristics acquired through the salient learning history of the minority student population and manifested as low performance within the college setting.

Noncognitive Factors and Failure to Achieve

Why do some minority students fail while others succeed? Turner and Turner (1974) have helped explode the highly prevalent myth that black college students have pervasively negative self-images. Their investigations have robbed many who hoped to account for the failure of black students in American colleges as the result of these negative self-images and evaluations.

Morrison (1973), reporting on the academically disadvantaged minority students at a major university, suggested that, if we trust the view of the college administrator, minority students drop out primarily because of financial problems (48 percent), inadequate emotional stability (39 percent), and lack of motivation (37 percent), not because of intellectual reasons. Burbach and Thompson (1973) compared persistors and nonpersistors among Puerto Rican, black, and white students on alienation (powerless, normlessness, and social isolation, as measured by the Dean Alienation Scale). They were unable to conclude that students who withdraw are more alienated than students who persist.

Demos (1968) surveyed the students of California State College on their reasons for leaving. He found that the officially reported reasons for dropping out did not match the self-reported reasons (as obtained through interviews). The findings show that 11 percent left for emotional, psychological, or personal problems. Thirty-five percent left because of poor grades, uncertainty of majors, lack of motivation, or work difficulties. Fifteen percent left for financial reasons. Bradfield (1967) matched lower-income freshmen with an equal number of controls. Using a battery of tests, Bradfield found that the low-income group started with personal characteristics that paralleled those reported for college dropouts. Measures of grade point average after one semester did not distinguish between the two groups.

These findings suggest it is less fruitful to search for characteristics that would identify the dropout than to search for attributes that support persistence. The consistent finding that the majority of the dropouts come from lower socioeconomic groups (Astin, 1964; Caskey, 1964) is supported in most studies, but there is, in addition, an indication that variables other than socioeconomic level may contribute to attrition (Bradfield, 1967). In a study of high-risk students who graduate, Paulsen and Stahmann (1973) concluded that the key elements in the success of this group were study habits and academic skills. The acquisition of these habits during the college years appeared to be the most significant factor in assuring graduation.

Perceptions of internal versus external control, as measured by the Rotter (I-E) scale, which measures the individual's attribution of control to self or external factors, has been a popular variable for explaining the success and failure of disadvantaged students. Hohmuth and Ramos (1973) were not able to confirm the hypothesized relationship between perception of internal locus of control and successful college achievement as measured by the GPA. These investigators, nevertheless, point to the finding that more of the internal control students successfully improved their failing performance of the first semester during the second semester. Lao (1970) also studied the relationship of internal versus external control at the personal level. Again utilizing the Rotter scale, Lao concluded that beliefs in personal control were positively related to traditional competence and achievement.

Bender and Ruiz (1974) studied 176 Mexican-American 11th graders from Arizona, using measures of internal control, future orientation, race, and SES, and studied the relation of these variables to achievement as measured by the vocabulary portion selected from the Shipley Institute of Levins Scale and GPA. The authors of this study hypothesized that, regardless of race or class, measures of internal control and future orientation would correlate positively with measures of achievement. Secondly, it was hypothesized that the Mexican-American students would show a pattern of less internal control and future orientation combined with lower achievement. The final hypothesis suggested that the lower the SES, the less the internal control pattern. Bender and Ruiz found support for all three hypotheses, thereby suggesting that class and race are not an automatic ticket to academic failure. What still needs to be demonstrated is that the internal control measured by these authors (defined as achievement reality orientation) can be developed independently of class and race. Of these two variables, class was a stronger determinant of achievement than race. The higher the class, the stronger the relationship with motivation, belief in internal control, and achievement.

Dispenzieri (1971) and his colleagues at the City University of New York studied the performance of disadvantaged students as a function of ability and personality measures. In a comparison of 492 disadvantaged students with 257 regular matriculates on motivation, ability, and several personality measures, the two groups did not differ on the academic motivation measure, although their motivational patterns were different. The special-program student was characterized by unrealistic aspiration, a self-reported need to prove his or her academic ability, a strong fear of failure, and high anxiety about his or her ability.

Egeland, Hunt, and Hardt (1970) compared Upward Bound students who went on to college with those who did not. The college group had higher self-evaluated intelligence and belief in the possibility and importance of college graduation. These investigators did not find significant differences in self-esteem, internal control, or future orientation.

Gelso and Rowell (1967) distinguished between low-ability students who persisted through the freshman year and those who did not. Using Borow's College Inventory of Academic Adjustment, these investigators found that survivors had more realistic academic goals, higher personal efficiency, and better overall adjustment. Miller and O'Conner (1969) found that the best success prediction for low-scoring minority students on the SAT was achievement motivation as measured by the B.G. Fricke Achiever Personality Scale. Burbach and Thompson (1971) compared 725 entering freshmen of a major university by the Dean Alienation Scale and by race. Three scales—powerlessness, normlessness, and social isolation—were used as the basis to compare white, Puerto Rican, and black entering freshmen. Powerlessness was defined similarly to

Rotter's external control. The results showed the black freshman to be the most alienated in the powerlessness and normlessness scales.

Hayes (1974) investigated the college environment as a variable related to the success of minority students. One hundred and thirty-eight undergraduate students of mixed ethnic groups, but predominantly black, were administered the College Characteristic Index and the Stern Activities Index to assess the students' perception of environmental press and psychological need as these affected the academic performance of minority students. As might be anticipated, for the minority student whose needs complement the institutional press, the college experience was a more successful one. DiCesare, Sedlacek, and Brooks (1972) added self-confidence and high aspirations as boosters to retention of black students in a major California institution.

Culture conflict is yet another major variable used to account for the academic failure of minority students. Justin (1970) analyzed the questionnaires of 168 male Mexican-American high school seniors. Feelings of personal control and perceived access to dominant-culture rewards were correlated with grade point average. Time orientation—expressed willingness to delay gratification—was not found to have any relationship with achievement. Familiarity with societal rewards and perceived access to the rewards of the dominant culture were also found to be unrelated to grade point average.

The literature on the relationship between the self-concept of minority students and academic performance has been extensively reviewed by Klingelhofer and Holiander (1973). They note that, although the studies of self-concept have consistently failed to differentiate between groups of students by ethnicity or socioeconomic status, and although these studies have had little commonality of reference, the self-concept measures seem to predict academic performance consistently. As a predictor, self-concept provided an addition to more traditional indices but not a replacement for them. Polite, Cochrane, and Silverman (1974) evaluated the responses of 96 black student volunteers on a semantic differential questionnaire. The black students had positive self-images, and the more positive the self-image, the greater the differences perceived between them and the white Protestant ethnic group.

Bledsoe and Wiggins (1974) provide some evidence that self-concept is related to academic adequacy and higher aspirations. Healey and DeBlassie (1974), noting that the literature shows considerable confusion about the relationship between self-concept and sociocultural factors, compare black, Spanish-American, and white self-concepts. The results of this study did not serve to clarify the confusion. The composite of 14 measures of self-concept was unsuccessful in differentiating among the three ethnic groups. The white group, expected to have the highest overall mean score, had instead the lowest.

The minority student experience has been extensively researched. Validity studies of predictors have avoided degree completion as a validity criterion for reasons which would suggest abandoning first-year grade point average as well—i.e., that it is a confounded criterion. The noncognitive factors investigated as determinants of academic performance proved to be numerous. The methods of investigation ranged from impressions to sophisticated surveys. The data led from an initial interest in factors accounting for failure to a look at the factors accounting for success. These factors tend to be broadly defined but, nevertheless, suggest a strong common strain. This strain is composed of attribution of internal control, achievement motivation, realistic aspirations, and positive beliefs about success. Personal efficiency and overall adjustment skills are the most important characteristics distinguishing the successful from the unsuccessful student. What is striking is that these are the very characteristics that are addressed in behaviorally oriented intervention systems. The utilitarian value of academic skills leads to better study habits, and better study habits lead to a value for, and reinforcement from, academic study. This conclusion is not unlike the view that thoughts (self-statements) determine behavior and behavior determines thoughts.

These findings point in the direction of emphasizing strategies for academic achievement: teaching minority students how to study, when to study, and what to study, rather than trying to compensate for hypothetical, ambiguous, and vague intellectual deficiencies. The findings also imply directions away from efforts to "enrich" the minority student or increase his appreciation for learning and its intrinsic value and instead toward the development of practical skills. The academic performance of minority students is enhanced by positive aspiration, achievement orientation, a practical orientation to educational opportunities, and positive self-evaluation. The development of these attributes is often a practical result of positive academic experiences. The variables that seem to support academic success are basic academic, organizational, and self-determination skills.

PROBLEMS OF MINORITY STUDENTS

Major epidemiological studies have associated a high incidence of psychological disorder with low social class (Hollingshead & Redlich, 1958; Srole, Langer, Michael, Opler, & Rennie, 1962; Dohrenwend & Dohrenwend, 1969). Other investigators have specifically reviewed the association between race and psychological disorder (Malzberg, 1960; Fitzpatrick *et al.*, undated). The relationship between urban poverty and race has also been well documented (Reissman, 1962). The etiological role of social class in psychological disorder has not yet been established or disproved. The question is related but secondary to our concern for drawing an accurate and relevant picture of the problems of minority students in higher education.

The clash of cultures on college campuses in the United States has not been a subtle one. Most readers will remember the era of the embattled campus and the demands of minority students for minority staff, minority faculty, and specialized minority academic departments—Puerto Rican, Mexican-American, and black studies. These were political and social as well as educational efforts. This review attempts to understand the individual minority student within the context of the campus, traditionally a bastion of middle-class America. As much as anything else, the admission of increased numbers of minority students to college brought with it class confrontations. The minority students wanted to synthesize and concretize their gains in higher education by making permanent departments and structures within it.

Minority students brought with them not only the attitudes and values of the minority poor, but also the characteristic problems of this population. These problems were very different from those of the traditional college student, and even when similar, they were manifested in different ways. If most minority students coming on to the campus are also from lower socioeconomic groups, it can be assumed that, not only the incidence, but the types of psychological and adjustment disorders will be those commonly reflected in lower socioeconomic groups. A major difficulty in amassing conclusive evidence supporting this assumption lies in the indicators of psychological disorder. Derogatis, Wittelsberger, and Yevzeroff (1975) have been persistent investigators of the nature and degrees of differences between measures of clinical symptoms used as indicators of psychological disorder. Their investigations have suggested that the traditional inverse relationship observed between social class and psychological disorder was a conditional one, based on the type and quantity of indicators used. Specifically, Derogatis *et al.* have found that the inverse relationship of class and disorder is supported by the types of symptoms (e.g., somatizations and anxiety) and, to some degree, by the number of symptoms. This finding tends to strain the assumption—and, at the very least, the ability to confirm the assumption—that the problems of minority college students tend to reflect those of minority lower-class populations in general.

Rendon (1974) has confirmed previous observations (Fitzpatrick & Gould, undated; Malzberg, 1965) that Puerto Ricans in New York City have a higher incidence of psychological disorder than would be anticipated by population size alone. Puerto Ricans, although comprising 3.9 percent of the population of New York, nevertheless account for 4.5 percent of first admissions to mental hospitals (Rendon, 1974). Rendon speculates that the high incidence of disorder among Puerto Ricans is a result of poverty, migration, language, family structure in conflict with dominant culture patterns, lack of assertiveness because of cultural expectations, and value conflict relative to sensuality. Rendon's findings suggest that these same characteristics should be identifiable in the Puerto Rican college student population as part of the pattern characteristic of the Puerto Rican adolescent in general. Rendon hypothesizes that the main explanation for the high incidence of psychological disorder among Puerto Ricans is transculturation. As applied here, transculturation means the process of replacing one set of cultural values with another, a process not unfamiliar to the majority of ethnic college students.

Rustin (1973) offers some insights into the problems of Puerto Rican college students. He gives prominence to conflicts between traditional Puerto Rican values and middle-class American values. This concept strongly parallels Rendon's transculturation concept derived from a noncollege population. Rustin's list of special problems related to the Puerto Rican student also parallels Rendon's observation of demographic characteristics and sexual conflicts. There is little information on Puerto Rican college students; the few studies, surveys, and descriptions nevertheless suggest that, while Puerto Rican students share many of the problems and characteristics of other minority groups, there are separate and unique problems usually resulting from the interaction of Puerto Rican and American cultural and family values. Logically, it may be anticipated that all minority groups in college share problems that result from minority status and personal reactions to having minority status.

Hammond (1970), writing from his experience as a psychologist on a college campus, notes what he refers to as the "qualitatively different syndrome" experienced by students from lower socioeconomic backgrounds. He is referring to the same phenomenon that Rendon calls transculturation and Rustin calls culture conflict. Hammond defines his "syndrome" as having to make the transition from one social class to another. Feelings of differentness, inadequacy, fear of failure, and alienation receive testimonial support from

Hammond. Other familiar observations have been a general, but personal, conviction that the qualities needed to succeed in college are missing.

Harvey (1970), while describing the problems of minority nursing students, points out that minority students must begin their college careers by accommodating and negating their differentness, a process that tends immediately to set them apart from the majority. A second characteristic problem emphasized is the prominent role of past failures in exacerbating fears of failure and evaluation. The somatic symptoms noted by Derogatis *et al.* is supported by Harvey's observations.

These problems must be evaluated within the context of the severe educational achievement problems noted in the previous section. A recent report of the City University of New York (Lavin & Silberstein, 1975) reveals that, of the 1,971 minority students entering as freshmen, 68 percent had performance scores below the eighth-grade level in either math or reading. In a review of the salient characteristics of minority college students, it was reported that they have many academically debilitating characteristics, including passivity, inability to delay gratification, and perception of external control vs. internal (personal) control, as well as pervasive negative self-concepts. Economic problems, and often unrealistically high expectations, also mark the minority student in college.

In sum, the following list of problems is characteristic of most minority students on American campuses:

Feeling unentitled to college. This is an often-cited feeling on self-report surveys. Observations of faculty and staff support self-reported negativism. These feelings are frequently expressed by students pointing to their own lack of preparation and low achievement scores. Students also report a general discomfort with nonminority persons on campus, because they claim they are made to feel inferior. They report that association with nonminority persons makes them feel that they are unrespected, different, and undervalued.

Loneliness and isolation. Students report a pervasive stress resulting from insufficient opportunity to relate to other minority group members.

Undeveloped career goals. Minority students have entered college with even less than a generalized idea of what they want to do, as compared to the traditional student. Minority students have either unrealistically high or unrealistically low aspirations and career goals.

Fear of performance evaluation. Minority students arrive on American campuses with a long history of failure on nationally normed tests, school grades, etc. This string of negative experiences has served to develop avoidance behavior and fears of failure rather than the achievement-oriented behavior more appropriate to a college setting.

Alienation from dominant campus culture and style. The minority student does not have the cumulative history of social learning that naturally accommodates college demands as the next stage of development. College environments have unfamiliar manifestations of racism for most minority students.

Internal vs. external attribution of control. Some students have described their experience as that of an unsuccessful salmon swimming upstream. There exists a pervading belief that the system and a variety of outside agents are determining or controlling the events in the student's life.

All these problems affect performance and adjustment in college. Some of these factors have received equivocal support from survey-type data. Other correlative relationships between minority students' performance and their characteristics and problems have been reliably observed (Klingelhofer & Hollander, 1973). At this stage, none of the literature can lead to cause-and-effect conclusions.

It is reasonable to conclude that minority students have more problems in terms of the traditional skills and characteristics needed for academic survival and achievement than traditional students. It is evident that many of the conflicts experienced by minority students can be explained by undesirable characteristics inherent in the American educational system. Were American educational institutions built on less elitist traditions, they could accommodate new and disadvantaged students as just another subgroup. It is reasonable to expect, however, that neither the educational system nor minority students themselves will change radically in the near future. Change appears to have come about from the perspective of the early '60s but, from a current perspective, progress is slow and laborious.

The interaction between the new category of students and traditional academic institutions may bring changes in both spheres. The dilemma for the educator is to accomplish these accommodations without the individual sacrifices that traditionally result from confrontations with an established system. In this regard, most writers have all too meticulously observed the changes needed in disadvantaged students to render them more acceptable to educational institutions. As a black educator recently put it, the institution asks the minority student to "Come as you are, but leave as you ought to be" (Harvey, 1970). The other type of popular solution suggested is massive social change, either by revolution or by legislation.

Minority status brings with it unique problems. Evidence has been provided to support the contention that the combined problems resulting from traditional adolescent development and minority status are overwhelming. In spite of the wide range of special problems and their intensity, minority students are repelled by the traditional strategies of intervention through counseling, guidance, and therapy. There is much speculation that the distance observed and documented between the minority college student and counseling programs is supported, if not originated, by class and ethnic differences between the students and the counselors. These considerations suggest the desirability of different efforts and different strategies to address the problems of minority students. Empirical evidence suggests that efforts oriented to the here and now are more effective with minority students, and that behavior-oriented techniques are also effective (Aikin, 1969; Whittaker, 1966; Gerdner, Bolman, & Tatsuguchi, 1972).

There are three compelling reasons why alternative methods of intervention, like self-control, should be explored. First, all efforts with traditional counseling systems have proven ineffective. Some, to be certain, have been reported as successful but, on the whole, there is not a single method that stands out as successful with minority college students. The literature on counseling these students supports the view that their needs are so tailored and culture-specific that counseling them should be viewed as a subspecialty (Collins & Collins, 1974; Vontress, 1969; Luetgert, 1972; and Bryde, 1971).

The second reason is reported in the minority utilization rates of counseling and psychiatric facilities on campus. Many investigators (Fager, 1973; Rustin, 1973; Davis & Swartz, 1972) report significant underutilization of guidance services. This suggests that, even if effective methods were available to the college counselor, it would be difficult to apply them to minority students. Third, there is evidence that the social distance between the counselor and the students undermines effective therapy and may be the basis for minority underutilization of counseling services (Bank, Berensen, & Carkhuff, 1967; Schumacher, Banikiotes, & Banikiotes, 1972; Sue, 1973; Tedeschi & O'Donovan, 1971; Banks, 1972; and Carkhuff & Pierce, 1967). These factors support the view that alternative systems of self-control should be explored.

Mahoney and Thorensen (1974) argue that self-control efforts date back to the beginning of man but have been the subject of scientific scrutiny for only a few short years. Modern self-control investigation is based on the social learning principles expounded by Bandura (1969), Mischel (1968, 1973), and others within the general domain of behavior modification. Self-control methods capitalize on operant principles and cognitive processes and, unlike the traditional concept of willpower, are learnable skills distinguishable from traits fatalistically approached as inborn.

In the last analysis, self-control methods are individual efforts to manipulate the environment by adjusting cues and consequences of specific behaviors so that the probability of manifesting desired behavior is greater than the probability of expressing the opposite behavior. Self-assessment is both fundamental and critical to successful self-control efforts. Self-assessment means self-observation—recording and evaluating one's own behavior as a prelude to regulating it by self-administered reward and punishment. These are the very same strategies and methods of the practicing behavior therapist who believes that the techniques and methods of behavior therapy need to be based on efficacy and utility rather than on placebo effect or mystique. If the methods of behavior therapy are effective because they are based on demonstrated and reliable relationships, then the client's application of the same principles to his own behavior may be equally effective.

There is now some evidence that individuals can indeed engineer their own environment, apply rewards to themselves as well as punishments, and assess the deficits or excesses of their own behavior (Franks & Wilson, 1973, 1974, 1975). The area of interest in this review is the applicability of self-control techniques to academic behavior. Mahoney (1972) has reviewed the efficacy of what he terms self-imposed techniques. Citing the research of Glynn (1970), Johnson (1970), Kanfer (1970), and Bandura (1971), Mahoney concludes there is substantial evidence indicating that self-control techniques are as effective as the exernally imposed techniques commonly associated with the behavior therapies. Mahoney's review does list some techniques that have been especially effective with academic behaviors, including positive self-reinforcement, negative self-punishment (removal of positive consequences), and stimulus control or increasing and decreasing target behaviors by manipulating the conditions that stimulate those behaviors.

Watson and Tharp (1972) have designed a book to serve both as a college text and a self-help book. They trace modern self-control developments to Skinner's publication of *Science and Human Behavior,* 1953. They also recognize the work of Kanfer and Marston (1963) and Kanfer and Phillips (1966) as pioneering the research on self-control.

Although there is now a substantial body of literature and research that provides the advocate of self-control methods with considerable confidence as to their efficacy, there remain many unresolved and unexplored issues. A major issue highlighted in the literature and reviewed by Mahoney (1972) is the reward efficacy of self-imposed deprivation (consequation) as compared with novel reinforcement. Another major issue more directly related to application is the issue of mainten-

ance. Self-management techniques require that the individual control some given responses for purposes of modifying the target behavior. How are the controlling efforts maintained? Mahoney has termed this the contract problem. Other issues are methodological ones related to the general deficiency of analogue research (Cambell & Stanley, 1963), the reliability of self-rewarded behavior, and the effects of self-monitoring (Green, 1974).

Significant research is under way that will define more effectively the potential of self-control methods. Self-improvement is desired by most persons, as suggested by the testimony of New Year's reolutions and deep respect for persons who have willpower. It can be assumed that motivation to change behavior is usually present. What is usually missing is the knowledge of how to modify, improve, or simply change one's own behavior.

The concern in this review is the connection between minority student characteristics, academic behavior, and self-control methodology. Having gained confidence that self-control techniques are indeed effective, there is a need to confirm their efficacy in the natural academic environment, with academic behaviors, and most especially with minority student populations. It will be demonstrated in the following section that self-control methodology is effective in modifying academic behavior; that self-control techniques can be more effective with minority student academic problems than traditional techniques; and, finally, that the biblioguidance presentation of self-management systems is as effective as counselor-presented formats.

Efficacy of Self-Control Methods with Academic Problems

There is evidence that deficits in academic behavior are amenable to modification by self-control techniques. Goldiamond's case report (1965) is a landmark for the application of self-control techniques in general, but especially for the application of self-management procedures to academic behaviors. The reference point for Goldiamond was Skinner's (1953) eight methods of self-control. Goldiamond reported on two case studies, one involving study behavior and the other illegible handwriting. As a baseline, Goldiamond required his study-behavior subject to record the hours spent studying each day. Characteristically, this assessment showed that study behavior in a given course was related to examinations. In a course with daily quizzes, study behavior was consistent and relatively high. In another course with one examination, study behavior was low until just prior to the exam and lower afterwards. The treatment consisted of self-recording of study behavior and weekly reporting to the therapist on general progress. In addition, specific note-taking skills and reading skills were taught to the client. Although the subject's performance improved as a function of those efforts (specific intervention in specific behavioral deficits), the failure to reverse completely the generally poor performance led Goldiamond to suggest that the general academic deficits were a result of inadequate chaining or, in this case, unsystematic or broken sequences in the educational curriculum.

This case presentation is important for several reasons. It is particularly important because it demonstrates, in the light of current developments, some of the limitations of self-control as singularly applied to a behavior deficit. Goldiamond's student had a history of incomplete sequential learning. This case may serve to define the limits of reasonable expectations. Self-help intervention may improve performance and functioning, but may not reverse the effects of broken educational sequences.

Jackson and VanZoost (1970) more directly studied the differential effects of self-reinforcement and externally administered reinforcement with four groups, including two control groups (one receiving no reinforcement, the other no treatment) and two experimental groups. The target was study behavior. The motivation requirements for self-control procedures were handled by requiring the subject to deposit $10 and contracting the method and conditions by which the money would be returned. The no-reinforcement group received $.50 for each session attended and $7 upon completion. The external-reinforcement group received money for completing exercises and questionnaires at each session, as well as for attending sessions. The self-administered-reinforcement group's members paid themselves according to the same guidelines as the external-reinforcement group. GPA was used as the measure of the dependent variable. All subjects were given six sessions of training by videotape on organization of study behavior, note-taking, concentration, reading methods, essay writing, and exam preparation.

The results suggested that both reinforcement groups showed equally significant gains in study habits that were maintained over a four-month follow-up. The control groups did not show any improvement in study habits. Most important was the finding that the self-administered reinforcing group continued to improve study habits beyond gains for the externally reinforced group. The implication of these results is that self-regulated behavior is at least as effective as externally regulated rewards and perhaps more so. The findings of Jackson and VanZoost further support previous findings by Lovitt and Curtiss (1969). These investigators speculate that the overall effect of self-monitoring, i.e., self-awareness, may have accounted for the improved study behavior. The effects of monitoring behavior have been demonstrated previously by Johnson and White (1971) and Green (1974).

Bristol and Sloane (1974) investigated the effect of contingency contracting on study time and general performance. Their study also sought to confirm previous findings (Johnson, Martin & White, 1970) that recording by itself acted as an independent variable.

Two dependent measures, test performance and study time, were taken. These were analyzed as functions of recording alone, recording and graphing, and contracting conditions. The findings indicated that contracting improved study behavior. Unfortunately, the independent effects of contracting could not be separated from the monitoring, reinforcement recording, and feedback aspects of the procedure. Nevertheless, the contracting group demonstrated improved test performance when the student had initially poor performance. Self-monitoring was not found to have any significant effect on either study time or test performance.

Green (1974) investigated the effects of self-modification procedures in the natural academic environment, using lower SES minority students. Green's results confirmed previous findings that self-reinforcement was more effective than self-monitoring in increasing academic behavior. A second interesting and relevant finding of Green's study was that subjects were able to engineer multiple self-management strategies at the same time and reliably monitor their own behavior. Green also distinguishes his study from previous investigations, such as Felixbroad and O'Leary (1973), by pointing out that his procedures required his subjects to select the amount and kind of reinforcement to be applied to academic behaviors.

Kazdin (1974) has analyzed the reactivity of self-monitoring. He defines reactive effects as the altering consequence of recording on the behavior that is being recorded. Previous studies, although generally supporting the conclusion that self-monitoring modified behavior, have not specified the conditions under which this change occurs. Kazdin measured performance on a sentence construction task under three experimental conditions. The first combined self-monitoring and social desirability (value condition) of the behavior; the second added a performance standard; and the third combined a performance standard with feedback. The results help to clarify some of the situations under which self-monitoring can induce behavior change. The direction of behavior change in self-monitoring strategies was affected by the valence of the behavior (i.e., better to record or count nonsmoking time than to count the number of cigarettes smoked). External monitoring and self-monitoring were equally reactive. Having a performance goal increased the response, as did feedback.

Test anxiety is another common negative academic behavior to be targeted for self-control techniques. Anxiety about tests is experienced by everyone, but for some it goes beyond the manageable state. College counseling centers are familiar with test anxiety as a common syndrome causing poor academic performance and contributing to the adjustment problems of college students. Typical college counseling centers have responded with the traditional insight therapy or some modified form of that system. In the more eclectically oriented counseling centers, test anxiety may be addressed by group counseling. More recently, group counseling has been combined with behavior therapy techniques, usually systematic desensitization. Katahn, Strenger, and Cherry (1966) were able to decrease test anxiety significantly, as measured by the Sarason Test Anxiety Scale (1958), by teaching students relaxation techniques, by systematic desensitization, and by giving advice through group counseling.

Suinn and Richardson (1971) assume that anxiety and resulting fear responses can be treated as discriminative stimuli, thereby enabling the therapist to condition a response that would effectively inhibit the fear-inducing properties of the stimulus. Essentially, this is similar to the traditional desensitization explanation, but Suinn and Richardson refer to this system as anxiety management therapy. Suinn and Richardson compared standard desensitization methods with anxiety management training (AMT), which consisted of deep muscle relaxation and imaginary scenes that variously aroused anxiety, elicited competency (success) responses, and encouraged relaxation. Procedurally, the subjects alternated their visualization of the anxiety scene with their visualization of either the competency scene or the relaxation scene.

Subjective anxiety, as measured by the Suinn test of anxiety, did not differ between the AMT and the standard desensitization groups, but both procedures effectively reduced anxiety. The procedure of alternating imagery appears amenable to self-control attempts, although no evidence was found to support this use.

Goldfried (1971) conceptualized desensitization procedures as an anxiety-reducing skill. This position would interpret avoidance behaviors as learned reactions resulting from a series of mediational stimulus-response (S-R) connections. Systematic desensitization does not, by this view, reciprocally inhibit fear reactions but rather builds in the relaxation response and modifies the cognitive labeling into an S-R mediational response. This position helps to conceptualize the use of relaxation and desensitization, in self-control models, as active coping skills that can be applied to everyday anxiety-provoking life situations. Reed and Meyer (1974) compared active and passive concentration in autogenic relaxation exercises. The active group was asked to be concerned over the relaxation effort and its effects. The passive group was asked to avoid voluntary effort at relaxation. Pre- and post-measures were taken, using a test of anxiety and a performance test. The active group had a greater decline in anxiety, although the groups did not differ on the performance measure. Both groups increased their performance. The self-induced efforts to relax, and the generally active role of the client in systematic desensitization, provide additional support for the use of self-induced relaxation as a coping skill.

Goldfried and Trier (1974) give support to the view that relaxation training can be a learned self-control skill subject to improvement with repeated practice. Twenty-seven speech-anxious college students were presented passive relaxation techniques, i.e., they were instructed that the techniques would work automati-

cally. In the second condition, relaxation was presented in a self-control explanatory context, i.e., they were instructed to make an effort to relax. The subjects were pretested on an anxiety measure and then they were required to give a four-minute speech to a small audience. The relaxation treatment was then provided and an equivalent post-test was taken.

Although there was no statistically significant difference between the two experimental groups, the self-control group showed consistent improvement and the actual change scores (from pre- to post-test) were greater for the self-control group. The subjects' overall ratings of satisfaction provide yet another measure of effectiveness. The self-control group had greater overall satisfaction ratings. These studies suggest that self-induced relaxation, or relaxation training, has the same therapeutic effects as when the therapist controls the induction of relaxation.

Biblioguidance as a Format for Teaching Self-Help Systems

There is much less information on biblioguidance techniques within a self-control system than on self-control methodology and its application to academic problems. What little there is suggests that motivation is the key ingredient, whether self-control techniques are taught by a therapist in a one-to-one context or by bibliotherapy. There are, in spite of the lag in research, many popular self-help books. None has been directed to the minority college student.

Beneke and Harris (1972) chose to teach stimulus control procedures to 38 university students and compare them to a control group on grade point average before and after the implementation of self-control methods. These investigators started with the assumption that the key problem for improving the students' study habits is convincing students to use the methods. Beginning with Marston and Feldman's (1972) conclusion that the success of self-control programs hinges on the strengths of the motivation to change and, secondly, on the procedures used to induce and maintain that change, Beneke and Harris both increased awareness of need (motivation) and taught the students self-control procedures.

Two groups of students were offered 11 lessons consisting of recording behavior (assessment of baseline), stimulus control principles and their applications, positive reinforcement, the SQ3R reading method (Robinson, 1970), punishment principles, taking lecture notes, taking exams, and the general procedures for maintaining good study habits. One group of students was given the lessons in weekly group meetings. The other group simply came to obtain a lesson, in the form of a written handout, each week. The gains, as measured by GPA, did not differ for the two groups; they were stable over two semesters and were significantly greater than for nonparticipating students. The results suggest that biblioguidance programs can be effective and that their critical requirement is the motivation of the students to follow the lessons. Unfortunately, the authors do not report on the SES or racial characteristics of the subjects.

Kahn and Baker (1968) treated phobic college students in two groups. The first group received conventional desensitization, and the second was a "do-it-yourself" group. They then compared the effect on phobic behavior. Through a self-report procedure, these investigators found no differences between the conventional and the self-treated groups. The do-it-yourself group received one session of instruction and a manual designed to enable the user to apply desensitization therapy to himself without therapist contact. The manual provided instructions for building a hierarchy. The group also received a phonograph record that consisted of a 20-minute training course on Jacobson's relaxation training, written by Arnold Lazarus.

Methodological limitations would not allow the conclusion that a patient can treat his own phobia with a few instructions, a manual, and a record, but the study strongly suggests that it is possible to expect that desensitization and relaxation, under the control of the patient, can be an effective tool of self-help.

The literature reviewed in this section provides evidence on which to conclude that self-control techniques, applied to the academic and personal adjustment problems of college students, can be effective. Self-control techniques are effective in modifying the student behavior that is most likely to interfere with academic performance and adjustment. There is sufficient evidence to support the contention that, in the hands of the client, they can be as effective as under the direction of a counselor, that self-help techniques can easily be learned, and that students do apply the techniques with beneficial results, independent of how they learn the techniques.

There remains a need to devise a self-assessment method amenable to the biblioguidance format. The literature offers little help with this problem. No evidence was discovered which effectively developed a technique for self-assessment not depending on the counselor's intervention.

MULTIMODAL SELF-ASSESSMENT

Self-assessment has been recognized by many writers of self-help and self-control books (Lazarus & Fay, 1975; Watson & Tharp, 1972; Williams & Long, 1975) as the critical factor in a self-management program. Developing the ability of the client to specify the problem in behavioral terms and record target behaviors is probably the single most difficult impediment to wider success for self-help efforts. Most persons habitually offer vague and broadly expressive descriptions of their behavior problems. Further, most persons have been taught to believe that personal and behavior problems are simply symptoms or manifestations of deepseated, complicated problems. They therefore assume that it would not be fruitful to concentrate on or understand the surface behaviors. With this premise, it is difficult to teach people to see their problems in terms of behavior.

This is precisely the task and goal of every self-help effort. There must be developed, quite early, confidence that behavior is a legitimate and essential target of a self-modification effort. Developing this conviction is tantamount to obtaining agreements to record and analyze behavior. Lazarus and Fay (1975) suggest that, if there is no notebook (recording of behavior), there will be no change.

Self-assessment, as described in the more prominent self-help books, has consisted of an analysis of three basic dimensions: the antecedents of the problem behavior, the problem behavior itself, and, finally, the consequences of that behavior. Thus, self-management corrections are either directed at changing the antecedents that act as discriminative to stimuli and to problem behavior, or directed at the manipulation of the consequences of that behavior (rewards and punishments). The object, then, is usually to eliminate or reduce the frequency of the problem behavior. A second dimension to the self-help efforts includes the development of new behaviors, for example, to increase study behavior as one decreases daydreaming behavior.

These straightforward systems are useful and effective with a clearly specified behavior problem. As has been described earlier, the problems of minority students do not always fall into a singular mold nor is it usually clear what the problem is. What is much clearer is that problem behaviors lead to unwanted consequences. More specifically, the minority student is aware of low performance, of high anxiety, of a string of negative feelings, but he or she has difficulty in defining the problem or target behavior for a self-modification program.

The assessment problem of the minority student begins with a more central point, i.e., a unique behavioral repertoire, and is not simply a matter of inappropriate behaviors. The problem is more akin to learning the entire behavioral repertoire of a foreign culture. Goldiamond's (1965) case presentation hints at the problem when he discusses the failure of learning blocks to build, so that each new block (course or level) builds on the previous one. Goldiamond's patient(s) needed more adequate learning than could be provided in any one course. Another example can be drawn from the monolingual child in Spanish who enters the first grade in the New York City school system (Cordasco & Bucchioni, 1968). When one attempts to teach the child to read, the language foundation for doing so is missing! In order to learn to read, the child must simultaneously learn a new language. It is more difficult to learn both things at one time than to know the language and then to learn the subject matter.

The problems of the minority college student then would require a more rounded and more comprehensive system of self-assessment than the straightforward identification of a problem, definition of antecedents, description of desired behavior, or projection of the consequences. This fundamental and critical form of self-assessment cannot be abandoned, but it needs to be supplemented with a more comprehensive starting base. This base, like our ABC (antecedent, behavior, and consequences) system, must have the clarity and simplicity to be easily manipulatable by college students.

Multimodal Analysis of Minority Student Problems

Using the problems discussed in the earlier section of this review, we will now place them in one of seven modalities and determine what self-control techniques may be applicable.

Behavior	—Poor academic performance - low test scores - insufficient time spent studying - too much time spent in social and recreational activities
Affect	—Fear of appearing stupid, fear of tests and evaluation, feeling unrespected and uninvolved, feelings of inferiority, loneliness and isolation, alienation, negative feelings of being different
Sensations	—Somatic symptomatology (headaches, back and muscle pains, and stomach pains, etc.)
Imagery	—Images of failure
Cognition	—Belief that he or she does not belong in college Belief that he or she is not entitled to or prepared for college Lack of career goals and objectives Belief that he or she lacks intelligence

Belief in external controls
Belief that some people are better than others

Interpersonal—Dislike for persons in college (authority)
Relations with fellow minority members

Drugs —Abuse of drugs

These may be translated into a basic ID analysis. (See Table 1.) The following proposed format is an adaptation from Lazarus (1973). It is proposed that, if students are provided the basic ID self-assessment framework along with the more traditional sequence of problem definitions (see Chart 1), it will be easier to connect a correction effort (self-control strategy) with a problem definition. In addition, the multimodal assessment system provides an opportunity and a method to assess more diffuse and less easily definable problems. The ease is determined by skills of the assessor in describing problems behaviorally. The multimodal approach can accept both assessors who have little practice in defining their own behavior in specific terms and trained professionals. For our purposes, we are adopting the multimodal system because it is teachable and easily grasped and implemented.

An adaptation of the problem-solving methods has been added to the multimodal system; namely, problem definition, change desired, behaviors to increase and behaviors to decrease. Finally, for each modality, a series of relevant self-control strategies are defined. These self-control strategies are teachable and highly applicable to the self-management system. They are the same therapy techniques used by the behavior therapist; many have received significant research suggesting their effectiveness.

Second to concern for the efficacy of the technique is whether a user of the multimodal self-assessment method can make the leap from problem identification and specification to a relevant self-control technique. This leap cannot occur unless the user has familiarity with the technique. Within a bibliotherapy format, a design for generalization may serve to direct the user from general problem areas (as examples) to specific problems for resolution. This is accomplished by (1) selecting general but relevant problems for assessment, (2) describing the application of the technique, and (3) providing the rationale for the technique. Multimodal assessment assists the process of generalizing the use of self-control methods by clarifying the logical connection between the problem identification, specification, and intervention.

Lazarus' (1971, 1973, 1975) multimodal approach to assessment provides a basic level of analysis along with the necessary clarity and simplicity. Multimodal analysis allows for an integrated and holistic view of a generalized problem and yet provides room for more specific analysis and priority listing of target behavior problems. In addition, the multimodal system does not require the client to learn a new terminology, nor does it force the client into a predefined and rigid framework. Quite the reverse; the system seems to adapt to the client, organizing what is unique and what is normative into a tailored mix. Consequently, the system is amenable to self-control techniques. These special characteristics of the multimodal system lend themselves to the unique set of problems that follows and characterize the minority person while simultaneously taking advantage of human strengths common to most persons. The emphasis on specificity, the lack of unifying constructs that force a fitting of the client, and the comprehensiveness of the system add to its usefulness for assessing the problems of minority students.

One further characteristic of the multimodal assessment system that makes it particularly adaptable to self-control methods is its more direct implication for treatment or correction. The multimodal assessment provides specific treatment implications and methodologies used within a behavioral focus and suggests treatment techniques that are malleable to self-control goals. This concept was well expressed by Lazarus (1973) in his summary of the parameters of a multimodal system: "Multimodal behavior therapy encompasses: (1) specification of goals and problems; (2) specifications of treatment techniques to achieve these goals and remedy these problems; (3) systematic measurement of the relative success of these techniques."

These three characteristics clearly tie multimodal analysis into the basic framework of behavior therapy principles. A fundamental tenet of the multimodal approach is the premium it places on comprehensive and lasting change. Because of these values, a multimodal approach is sensitive to the educational elements in therapy and capitalizes on the general findings that self-controlled changes are more lasting. The educational element in the multimodal system is just this reliance on the clients' own beliefs and desires for change. Lasting change is also seen as a function of comprehensiveness of the system. Thus, the assessment is made in seven modalities rather than one. Any treatment which deals with only one modality is considered by Lazarus an incomplete treatment (personal communication). The seven modalities comprehensively cover the behavioral personality; i.e., any behavior can easily be relegated to one of the following seven modalities: behavior, affect, sensations, imagery, cognition, interpersonal, and drugs (medication).

These dimensions provide an organizational scheme not only for analyzing the problems of an individual, as they were designed to do, but are also useful for analyzing sociocultural problems. A sociocultural system, such as a collegiate or university system, prescribes specific and generalized behaviors. These prescriptions are not troublesome for most, because they are sequentially relevant to their social learning history. Without the sequential learning history, it is likely that at least some dominant behavior patterns, learned from other social systems, are not in keeping with the university environment or are maladaptive within it.

Not only behavior, but feelings (affect), are likely to

1	2	3	4	5	6
Modality	Problem	Change Desired	Behavior to Increase	Behavior to Decrease	Modification
Behavior	Poor academic performance.	Higher test scores, climate test anxiety, increase study time and effectiveness, decrease recreational time.	Study time.	Recreational and unproductive time.	Self-assessment and recording, stimulus control, contingency control, contracting, modeling, shaping.
Affect	Fear of appearing stupid, fear of tests, evaluation.	Self-confidence, controlled test behavior, develop assertiveness.	Self-confidence assertions.	Fears and negative feelings related to tests and self-evaluation.	Self-statements, assertive training, desensitization.
Sensations	Somatic symptomatology.	Reduced headaches, stomach aches, and other somatic symptoms.	Health care.	Anxiety.	Relaxation techniques, densitization.
Imagery	Images of failure.	Reduce negative and increase positive imagery.	Positive imagery.	Negative imagery.	Stop techniques and densitization.
Cognition	Belief that he or she does not belong in college. Lack of career goals and objectives.	Self-confidence, self-worth, development of career goals.	Self-confidence, self-worth, career exploration.	Negative self-assessments.	Positive self-statements, career exploration, stop techniques.
Interpersonal	Dislike for persons in college (authority), relations with fellow minority members.	Reduce interpersonal conflict.	Assertive behavior.	Aggressive submission behavior.	Assertion training
Drugs	Abuse of drugs.	Reduced use.	Periods without drugs.	Frequency of drug use.	Stimulus control. contingency control.

be associated with different discriminative stimuli. For example, minority students often experience rage at a perceived affront by a secretary when, in the secretary's view, she is simply doing her job. The racial discrimination and rejection experienced by the student in the past led him to interpret the offhand behavior of the secretary as insulting, discriminating, and prejudiced. It may very well be, but neither rage nor submission may be the best response. In the past, rage and submission have been the most effective responses to prejudice; consequently, they are likely to be displayed in a strange setting as a generalized response. In another modality, sensations that may be pleasant for someone with a culturally specific learning history may not be pleasant for someone with a different learning history. For example, some minority students appreciate music in the loudest tones. These same sensations (tones), to the unlearned ear, are offensive and discomforting. Black urban students have found a very poor reception for their favorite music when played loudly in a dormitory dominated by a white majority.

Anxiety-producing images, reflecting fears of strange and unwanted experiences, might characterize the minority student in general more than the better accom-

modated traditional student. Cognitions, defined by Lazarus (1973) as the "insights, philosophies, ideas, and judgments that constitute our fundamental values, attitudes, and beliefs," certainly differ, for the minority student, from the traditional middle-class values and beliefs that dominate most American colleges and universities.

The interpersonal styles and bases for developing relationships clearly can be different as a function of race, culture, and socioeconomic level. Finally, drug dependence is believed to be more endemic among poverty groups than among other groups within American culture. The point is that the basic ID grid (behavior, affect, sensations, imagery, cognition, interpersonal, and drugs) of the multimodal paradigm allows an analysis which more clearly accommodates the minority population as distinguished from the majority. The grid allows a closer analysis of these differences and allows for individual analysis and individual choice of any desired modifications. The multimodal system is less subject to culture-bound value definitions. There is no implicit statement about which feelings, images, etc., are right or wrong.

Most intervention systems are directed at providing a person with ways and means of resolving and/or avoiding a wide array of personal and social problems. Our proposed application of multimodal assessment directs itself at helping a category of people to resolve a broad but singular behavioral problem, namely, successful completion of college and maximizing the opportunity for successful career development. There are, then, two major conclusions which can be drawn:

1 Since minority problems are global rather than specific, multimodal assessment is more effective for minority self-control.

2 Since multimodal assessment focuses on the individual, it is less culture-limited than traditional techniques that seek to force a fit into a pre-existing framework.

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